

## K2

KGK G1 · G2 · G3

VERTICAL SUMP PUMPS  
FOR CORROSIVE FLUIDS

PP · PVDF

50 Hz



SINCE 1975

EN

# THERMOPLASTIC VERTICAL SUMP PUMPS

## FOR AGGRESSIVE LIQUIDS

The KGK series are centrifugal pumps made of Polypropylene or PVDF (reinforced with carbon fiber) designed for vertical installations, with column and volute casing submerged into the liquid to pump, and with an external motor. The pump shaft's length goes from 0,5 to 4 m.

### APPLICATIONS

KGK are realised with extremely resistant materials for pumping aggressive, viscous or even corrosive chemical agents.

They can pump acids, hydroxide, salt, high acid mixes, galvanic baths, aromatic hydrocarbons, alcohols, emulsions, seawater or thermal water.

These liquids are directly pumped from tanks, basins or even wells with temperatures up to 90°C.

Three different motor powers can be installed according to the pumped liquid (execution - specific weight):

- “N” standard - 1,1
- “P” upgraded strength - 1,35
- “S” super upgraded strength - 1,8

KGK are mainly installed in the following sectors:

- Wastewater treatments
- Electrochlorination
- Stripping
- Scrubbers
- Cooling towers

### GUIDE BUSHINGS

The material of the guide bushing and wear bushings (located in the lower side of the pump close to the casing) are respectively glass reinforced PTFE + AL2O3 or for solids or abrasive particles laden liquids, Silicium Carbide + Silicium Carbide. The pumped fluid lubricates the bushings. Auxiliary external flushing with clean water is available for liquids with solids or abrasive particles.



### MATERIALS

**PP** Polypropylene

**PVDF** Vinylidene polyfluoride

**PP<sub>s</sub>** “S” antistatic polypropylene

**PP** + **FRP** Fiberglass

**PVDF** + **CFF** Carbon fiber

**PP<sub>s</sub>** + **FRP** “S” antistatic fiberglass

	WR	WF	FC	WRG	WFG	FCG	WRX	WRGX
<b>Pump casing</b>	GFR-PP	GFR-PP	CFF +PVDF	GFR-PP	GFR-PP	CFF-PVDF	GFR-PP	GFR-PP
<b>Impeller</b>	GFR-PP	CFF-PVDF	CFF-PVDF	GFR-PP	CFF-PVDF	CFF-PVDF	GFR-PP	GFR-PP
<b>Coated shaft</b>	PE	PE	PTFE	PE	PE	PTFE	PE	PE

### TEMPERATURES

	Max working temperature (°C)
<b>WR / WF</b>	+30 - +70*
<b>FC</b>	+40 - +90*
<b>WRG</b>	70
<b>WFG</b>	75
<b>FCG</b>	80
	Ambient temperature (°C)
<b>WR / WF</b>	0 - +40
<b>FC</b>	-10/0 - +40*
<b>WRG/WFG</b>	0 - +40
<b>FCG</b>	-10/0 - +40

\*depending on the length of the column

### VAPOUR SEAL SYSTEM

Vapours can be developed inside the pump under static or dynamic conditions. KGK pumps are equipped with a V-ring dry vapour seal nearby the baseplate to contain these vapours.

A specific execution for extremely dangerous liquids is available with double mechanical seals and external flushing instead of the dry standard vapour seal.

## COLUMN LENGTH (mm)

available not available

	500*	750	1000	1250	1500	1750	2000	2250	2500	2750	3000	3250	3500	3750	4000	
WR - WF - FC	available											not available				
WRG - WFG - FCG	available															

## MOTOR POWER INSTALLED (50 Hz)

Motor for specific weight 1.1 kg/dm<sup>3</sup> at full capacity and max. impeller size ●  
 Motor 4 poles ■ Motor 2 poles. ■

kW	0.25	0.37	0.55	0.75	1.1	1.5	2.2	3	4	5,5	7,5	11	15	18,5	22	30	37	45
C25/100	●	■			●													
C25/120		■	●	■			●		■									
C32/120			■	●	■			●	■									
C32/140				■	●	■			●	■								
C32/160					■	●	■			●	■							
A40/100			■	●	■				●	■								
A40/120				■	●	■				●	■							
C40/140					■	●	■			●	■							
C40/160					■	●	■				●	■						
A50/100					■	●	■				●	■						
A50/120						■	●	■			●	■						
A50/140							■	●	■			●	■					
C40/180												■	●	■				
C40/200															■	●	■	
C50/160								■	●	■					■	●	■	
D50/160									■	●	■							
C50/200										■	●	■					■	●
D50/200											■	●	■					
C65/160									■	●	■						■	●
D65/160											■	●	■					
C65/200											■	●	■				■	●
D65/200												■	●	■				
C80/160										■	●	■					■	●
D80/160												■	●	■				
C80/200												■	●	■				
D80/200													■	●	■			
C100/160												■	●	■				
D100/160													■	●	■			
C100/200													■	●	■			
D100/200														■	●	■		●



**KGK G3**



**KGK G1**

# TECHNICAL DATA

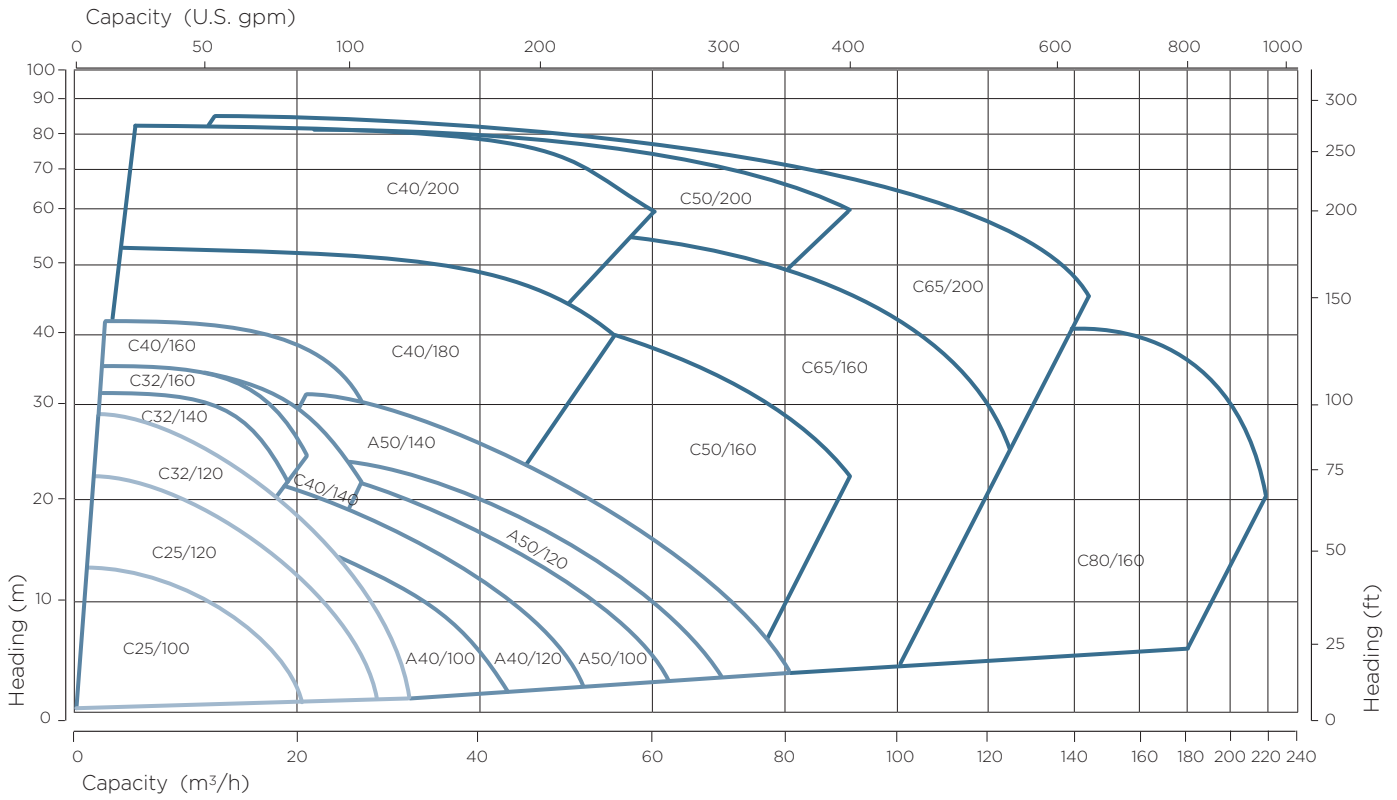


50 Hz

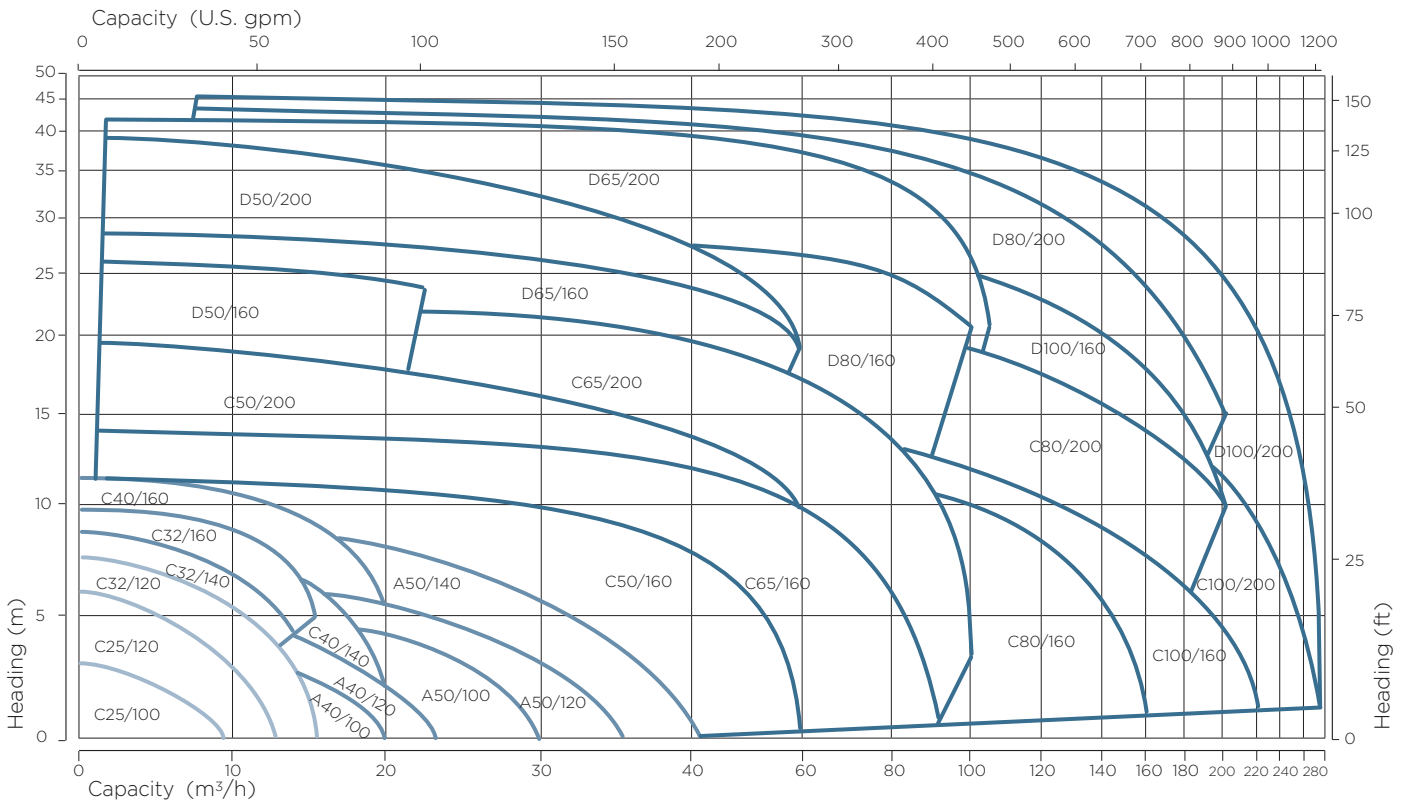
C = Covered impeller A = Open impeller

G1 G2 G3

## 2900 rpm



## 1450 rpm



We offer two different constructive hydraulic typologies:

### G1-G2 sizes

- impellers and single-stage volute casing work with centrifugal flows
- the lubrication of the bearing is realised with grease

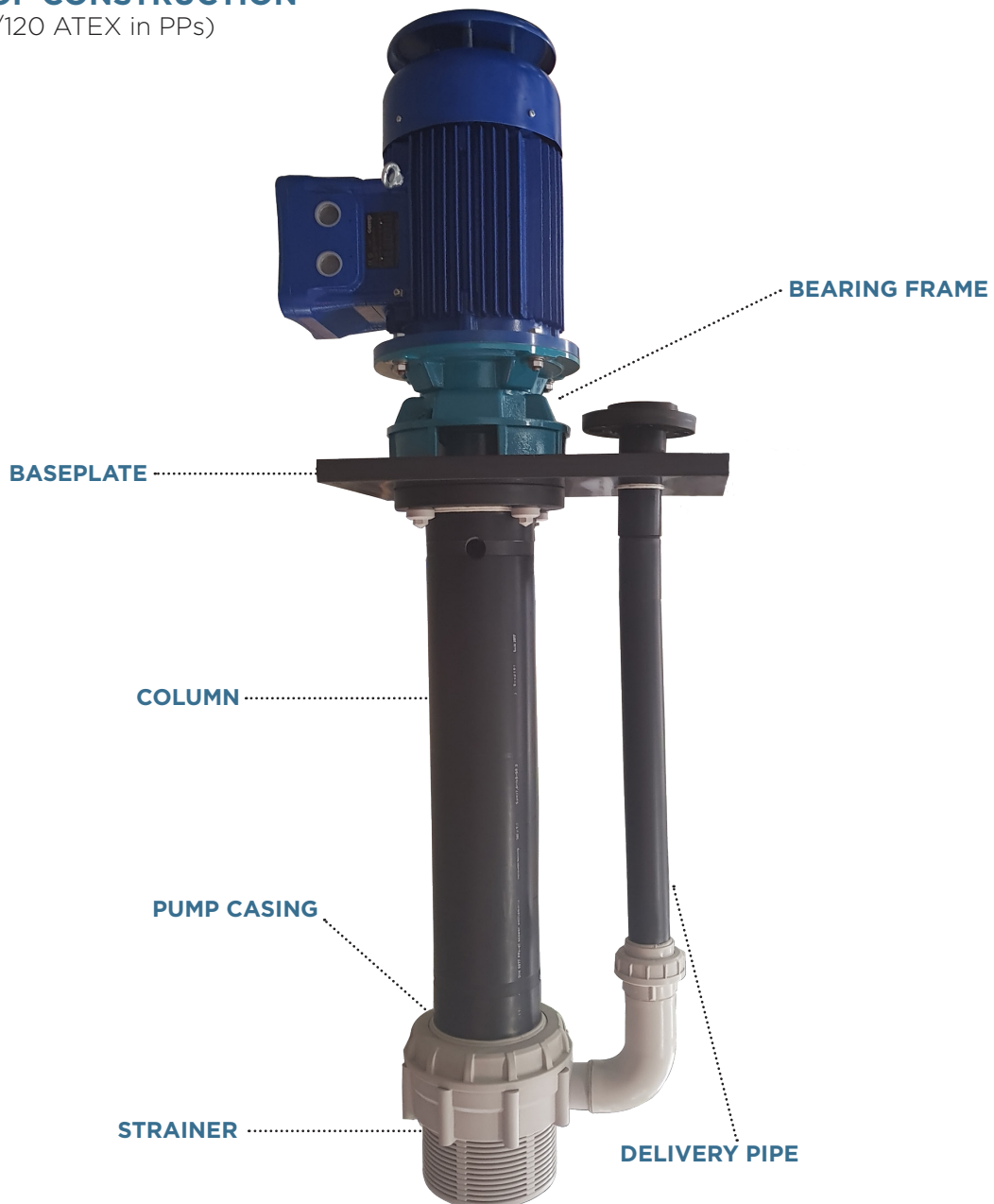
### G3 size

- impellers and casings generating semi-axial flows
- single or double-stage with one or two impellers in series
- the lubrication of the bearing is realised with oil

For all the pumps, the hydraulic axial inlet connection is downwards and fitted with protective filter; the outlet radial connection is joint to a vertical upward oriented discharge pipe to be connected to the hydraulic system, out of the tank, on the base plate. The support includes the rolling bearing and the elastic coupling and allows the central self-alignment of the normalised electrical motor.

## EXAMPLE OF CONSTRUCTION

(KGK G2 C65/120 ATEX in PPs)



MECH-SEALED  
& MAG-DRIVEN  
CENTRIFUGAL  
PUMPS

AIR-METERING  
& AODD PUMPS  
PULSATION  
DAMPENERS

SELF-PRIMING  
PUMPS



ARGAL srl  
Via Labirinto, 159 - 25125 BRESCIA  
Tel. 030 3507011 | sales@argalpumps.com  
www.argalpumps.com



SUMP  
PUMPS